Rebecca,

Attached are the original signed Declarations for OU1 and OU2 for your records.
Please indicate if you need any thing else for the record.
Thank you.

Dick Sloan

**RECORD OF DECISION**

**FOR**

**LIBBY ASBESTOS SUPERFUND SITE**

**THE FORMER EXPORT PLANT**

**OPERABLE UNIT 1**

**LINCOLN COUNTY, MONTANA**

# Part 1
# Declaration

## Site Name and Location

The Libby Asbestos Superfund Site (Libby site) (Comprehensive Environmental Response, Compensation, and Liability Information System [CERCLIS] # MT0009083840) is located in and around the Town of Libby, Montana. Libby is the county seat of Lincoln County and is in the northwest corner of Montana, about 35 miles east of Idaho and 65 miles south of Canada (Exhibit 1-1). Operable Unit 1 (OU1), also known as the former Export Plant, is one of eight OUs at the site and is located in town at the intersection of Highway 37 and the Kootenai River.

## Statement of Basis and Purpose

This decision document presents the selected remedy for OU1. The remedy selected in this ROD was chosen in accordance with the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980, as amended by the Superfund Amendments and Reauthorization Act of 1986 and the National Oil and Hazardous Substance Pollution Contingency Plan (NCP). The decision is based on the administrative record file for OU1 of the site. This document is issued by the EPA Region 8, the lead agency, and the Montana Department of Environmental Quality (MDEQ). Both EPA and MDEQ concur on the selected remedy presented herein.

The remedial action selected in this ROD is necessary to protect public health and welfare and the environment from actual or threatened releases of hazardous substances at the site. It will reduce the public health risks by blocking contaminant pathways to the available receptors. However, the selected remedy must be reevaluated when the site-wide risk assessment is completed. An ecological risk assessment is being developed at the mine site, OU3. Once that work is complete, EPA will build upon information gathered during the risk assessment for OU3 to identify potential pathways and receptors to evaluate ecological risk at OU1.

## Assessment of Site

The response action selected in this ROD is necessary to protect the public health and welfare and the environment from actual or threatened releases of hazardous substances into the environment.

## Description of Selected Remedy

The majority of the OU has already been remediated through past removal actions. The selected remedy will eliminate the remaining exposure pathway to the Libby amphibole asbestos (LA) contamination present at the OU by a combination of containment (with soil covers) and removal (excavation and disposal). Institutional controls (ICs) with monitoring and statutory reviews (five-year reviews and other) will provide assurance that the integrity of the remedy will be protected.

EPA will also conduct a review to evaluate effectiveness of the remedy, as soon as sufficient new information concerning toxicity factors is available. If unacceptable

exposures are identified, EPA will take action as necessary to ensure that the soil-to-air pathway is broken. Actions may include additional excavation, improving covers, and/or strengthening ICs. When the site-wide risk assessment is completed, the ICs will be revisited to determine whether any modification is needed.

## Statutory Determinations

The selected remedy meets the mandates of CERCLA §121 and the National Contingency Plan. The remedy is protective of human health and the environment. It complies with all federal and state requirements that are applicable or relevant and appropriate to the remedial action, is cost effective, and utilizes permanent solutions and alternative treatment technologies to the maximum extent practicable.

The remedy does not satisfy the statutory preference for treatment as a principal element of the remedy (this preference is triggered by the presence of a principal threat waste). Treatment of LA is not viable at OU1 for several reasons:

- High relative cost. Thermo-chemical treatment of asbestos wastes is significantly more expensive that off-site disposal. Because the wastes must be shipped to an off-site treatment facility in another state, treated, and then shipped back to the site for disposal, transportation costs are also disproportionately high. Treatment of LA-contaminated soil increases the remedy costs by over 600% without adding significantly to protectiveness.

- Lack of irreversibility data. In addition to the cost issues related to treatment, the treatment technology is relatively new, so extensive data are not available to confirm long-term irreversibility of the treatment process.

- Ongoing need for monitoring and five-year reviews. Subsurface waste material will remain at depth at the site, so the treatment of the small amounts of remaining near surface LA would not negate the need for ongoing monitoring and five-year reviews. Thus no efficiencies or savings are gained regarding treatment in terms of long-term protectiveness

As noted above, a statutory review will be conducted within 5 years after initiation of remedial action to ensure that the remedy is, or will be, protective of human health and the environment.

## Future Public Comment

When the site-wide risk assessment is complete, the agencies will re-evaluate the remedy in accordance with the review requirements at CERCLA Section 121(c). This determination will be published and an opportunity for public comment will be provided. Similar opportunities for public comment will be provided at the time of the subsequent five-year reviews.

# ROD Data Certification Checklist

Once a quantitative site-wide risk assessment is completed and a cleanup level is established, the ROD for this OU will be modified, as appropriate. If modified, the ROD will include this new information and will incorporate all necessary remedial actions, modifications of the institutional controls, and modifications to operation and maintenance plans in order to properly manage the residual contamination in a manner that will protect human health and the environment. The following information is included in the decision summary section (Part 2) of this ROD. Additional information can be found in the administrative record file for this site.

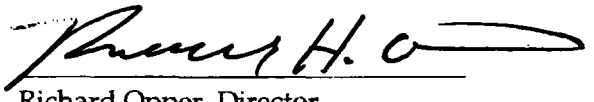
- Contaminants of concern and their respective concentrations
- Risks represented by the contaminants of concern
- How source materials constituting principal threats are addressed
- Current and reasonably anticipated future land use assumptions used in the risk assessment
- Potential land use that will be available at the Site as a result of the selected remedy
- Estimated capital, annual operation and maintenance (O&M), and total present worth costs, discount rate, and the number of years over which the remedy cost estimates are projected
- Key factors that led to selecting the remedy

Cleanup criteria for levels of concern and the basis for those levels are typically included in a ROD. However, a site-wide risk assessment has not yet been completed. Although an OU-specific human health risk assessment was conducted for OU1, it did not include LA-specific toxicity values. In the absence of established quantitative, risk-based cleanup levels, EPA is removing and/or capping all visible vermiculite and any detectable LA thereby breaking complete exposure pathways and reducing future potential risk for LA exposure. Exceptions include vermiculite that is otherwise well-contained. If LA source materials are encountered during excavation activities, removal will continue until the source material is removed (to a maximum of 3 feet). If contamination continues below 3 feet, a visible barrier marking the extent of excavation will be placed before backfilling. Once sufficient data are obtained to establish the LA-specific toxicity values, the site-wide risk assessment will be conducted to verify that the exposure pathway is broken.

## Authorizing Signatures

Carol L. Campbell
Assistant Regional Administrator
Office of Ecosystem Protection and Remediation

Date



Richard Opper, Director
Montana Department of Environmental Quality

5/10/12
Date

**RECORD OF DECISION**

**FOR**

**LIBBY ASBESTOS SUPERFUND SITE**

**THE FORMER SCREENING PLANT AND SURROUNDING PROPERTIES**

**OPERABLE UNIT 2**

**LINCOLN COUNTY, MONTANA**

# Part 1
# Declaration

## Site Name and Location

The Libby Asbestos Superfund Site (Libby site) (CERCLIS #MT0009083840) is located in and around the Town of Libby, Montana. Libby is the county seat of Lincoln County and is in the northwest corner of Montana, about 35 miles east of Idaho and 65 miles south of Canada (Exhibit 1-1). Operable Unit 2 (OU2), also known as the "former screening plant and surrounding properties," is one of eight OUs at the site and is located near the intersection of Highway 37 and Rainy Creek Road, approximately 5 miles north of town.

## Statement of Basis and Purpose

This decision document presents the selected remedy for OU2. The remedy selected in this ROD was chosen in accordance with the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980, as amended by the Superfund Amendments and Reauthorization Act of 1986 and the National Oil and Hazardous Substance Pollution Contingency Plan (NCP). The decision is based on the administrative record file for OU2 of the site. This document is issued by the EPA Region 8, the lead agency, and the Montana Department of Environmental Quality (MDEQ). Both EPA and MDEQ concur on the selected remedy presented herein.

The remedial action selected in this ROD is necessary to protect public health and welfare and the environment from actual or threatened releases of hazardous substances at the site. It will reduce the public health risks by blocking contaminant pathways to the available receptors. However, the selected remedy must be reevaluated when the site-wide risk assessment is completed. An ecological risk assessment is being developed at the mine site, OU3. Once that work is complete, EPA will build upon information gathered during the risk assessment for OU3 to identify potential pathways and receptors to evaluate ecological risk at OU2.

## Assessment of Site

The response action selected in this ROD is necessary to protect the public health and welfare and the environment from actual or threatened releases of hazardous substances into the environment.

## Description of Selected Remedy

The majority of the OU has already been remediated through past removal actions. The selected remedy will eliminate the remaining exposure pathway to the Libby Asbestos (LA) contamination present at the OU by removing the waste (in surface soils near sample location 1-03000) and by breaking the exposure pathway associated with disturbance of the source materials by in-place containment (contaminated soil within the west embankment of Highway 37). Institutional controls (ICs) and statutory reviews (five-year and other) will provide assurance that the integrity of the remedy will be protected.

EPA will also conduct a review to evaluate effectiveness of the remedy, as soon as sufficient new information concerning toxicity factors is available. If unacceptable

exposures are identified, EPA will take action as necessary to ensure that the soil-to-air pathway is broken. Actions may include additional excavation, improving covers, and/or strengthening ICs When the site-wide risk assessment is completed, the ICs will be revisited to determine whether any modification is needed.

## Statutory Determinations

The selected remedy meets the mandates of CERCLA §121 and the National Contingency Plan. The remedy is protective of human health and the environment. It complies with all federal and state requirements that are applicable or relevant and appropriate to the remedial action, is cost effective, and utilizes permanent solutions and alternative treatment technologies to the maximum extent practicable.

The remedy does not satisfy the statutory preference for treatment as a principal element of the remedy (this preference is triggered by the presence of a principal threat waste). Treatment of LA is not viable at OU2 for several reasons:

- **High relative cost**. Thermo-chemical treatment of asbestos wastes is significantly more expensive that off-site disposal. Because the wastes must be shipped to an off-site treatment facility in another state, treated, and then shipped back to the site for disposal, transportation costs are also disproportionately high given the small volume of wastes that would be removed

- **Inaccessibility of waste material**. Unless the design process finds that the structural integrity of the roadway would not be compromised by removing the soils, the highway right-of-way soils will be addressed through containment rather than removal. Treatment would not be possible because wastes would not be removed and thus could not be treated.

- **Lack of irreversibility data.** In addition to the cost issues related to treatment, the treatment technology is relatively new, so extensive data are not available to confirm long-term irreversibility of the treatment process.

- **Ongoing need for monitoring and five-year reviews.** Subsurface waste material will remain at depth at the site, so the treatment of the small amounts of remaining near surface LA would not negate the need for ongoing monitoring and five-year reviews. Thus no efficiencies or savings are gained regarding treatment in terms of long-term protectiveness

As noted above, a statutory review will be conducted within five years after initiation of remedial action to ensure that the remedy is, or will be, protective of human health and the environment.

## Future Public Comment

When the site-wide risk assessment is complete, the agencies will re-evaluate the remedy in accordance with the review requirements at CERCLA Section 121(c). This determination will be published and an opportunity for public comment will be

provided. Similar opportunities for public comment will be provided at the time of the subsequent five-year reviews.

## ROD Data Certification Checklist

Once a quantitative site-wide risk assessment is completed and a cleanup level is established, the ROD for this OU will be modified, as appropriate. If modified, the ROD will include this new information and will incorporate all necessary remedial actions, modifications of the ICs, and modifications to operation and maintenance plans in order to properly manage the residual contamination in a manner that will protect human health and the environment.

The following information is included in the decision summary section (Part 2) of this ROD. Additional information can by found in the administrative record file for this site.

- Contaminants of concern and their respective concentrations
- Risks represented by the contaminants of concern
- How source materials constituting principal threats are addressed
- Current and reasonably anticipated future land use assumptions used in the risk assessment
- Potential land use that will be available at the Site as a result of the selected remedy
- Estimated capital, annual operation and maintenance (O&M), and total present worth costs, discount rate, and the number of years over which the remedy cost estimates are projected
- Key factors that led to selecting the remedy

Cleanup criteria for levels of concern and the basis for those levels are typically included in a ROD. However, a site-wide risk assessment has not yet been completed. Although an OU-specific human health risk assessment was conducted for OU2, it did not include LA-specific toxicity values. In the absence of established quantitative, risk-based cleanup levels, EPA is removing and/or capping all visible vermiculite and any detectable LA thereby breaking complete exposure pathways and reducing future potential risk for LA exposure. Exceptions include vermiculite that is otherwise well-contained. If LA source materials are encountered during excavation activities, removal will continue until the source material is removed (to a maximum of 3 feet). If contamination continues below 3 feet, a visible barrier marking the extent of excavation will be placed before backfilling. Once sufficient data are obtained to establish the LA-specific toxicity values, the site-wide risk assessment will be conducted to verify that the exposure pathway is broken.

**Authorizing Signatures**

Carol L. Campbell
Assistant Regional Administrator
Office of Ecosystem Protection and Remediation

Date

Richard H. Opper

Richard Opper, Director
Montana Department of Environmental Quality

5/10/10
Date